



Seagrass-Watch E-Bulletin

February 2010

Seagrass-Watch's electronic news service, providing marine and coastal news of international and national interest. Abbreviated articles are presented with links to their source. Seagrass-Watch HQ recommends that readers exercise their own skill and care with respect to their use of the information in this bulletin and that readers carefully evaluate the accuracy, currency, completeness and relevance of the material in the bulletin for their purposes. You are free to distribute it amongst your own networks.

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Please note: links to sources were active on date of publication. Some sources remove links periodically.

NEWS

Iron soils cause sea blooms (Queensland, Australia)

29 January 2010 ScienceAlert

Australia's own distinctive red soils could play a part in the formation of the stinking swathes of blue-green algae often shovelled off east coast beaches in summer. A QUT team of scientists is taking an in-depth look at how iron, which gives our iron-rich soil its red colour, reaches water to potentially contribute to the algal blooms, which not only have a foul smell, but also make our eyes sting, cause fish kills and smother seagrass.

Their research is centred on the catchment of Poona Creek on the Fraser Coast which drains into Great Sandy Strait - a dugong sanctuary and an internationally recognised wetlands for migratory birds.

Iron is known to be a component causative factor for algal blooms but the mechanism by which solid iron in soils becomes soluble and contributes to coastal algae blooms is largely unknown. That is why the team from QUT's Institute for Sustainable Resources is taking the three-pronged approach of microbiology (biogeochemistry), geochemistry and hydrology studies to put together enough pieces of the iron jigsaw to form the basis for future research into mitigating its contribution to dangerous algal blooms.

The study is funded jointly by the Queensland Department of Primary Industries-Forestry, Forestry Plantations QLD and the Australian Research Council.

Full story and source: <http://www.sciencealert.com.au/news/20102901-20546-2.html>

Seagrass Comeback: a Race Against Time and Boat Propellers (USA)

24 January 2010, Treehugger

One of the dangers to ocean coastlines is due to loss of seagrass meadows. This results in a loss of fish and marine life habitat, a decrease in food supply and eliminates some of the ocean's carbon storage, among other problems that lead to global warming. Polluted water kills seagrass and loss of seagrass leads to lousy water quality. Then there's the trenches ripped by grounded boats and propellers in a patchwork of scars. How can we stop the destruction of this key and fragile ecosystem?

Restoration of these "blue forests and blue carbon sinks" can combat climate change effectively and prevent sea level rise. "Blue Carbon: The Role of Healthy Oceans in Binding Carbon," produced by UN agencies and scientists, reports that these vegetative habitats are efficient carbon sinks, covering less than 1 percent of the seabed yet store a comparable amount of carbon per year.

The Bio Science journal describes the current crisis and the Ocean Foundation's solutions, such as recovering this vegetation through the Restor-A-Scar program. Saving seagrass meadows also involves reducing pollution and creating marine protected areas. Repairing the thousands of square miles involves hand planting and transplanting to refurbish damaged beds.

Over the last fifteen years, Seagrass Recovery, based in Florida, has been preserving seagrass. With 150 projects around the world, its tools repair and restore seagrass and balance to marine eco-systems with quick methods, showing results in 12-18 months, depending on the species. New techniques like the Giga Unit Transplant System (GUTS) machine prove more effective than hand-transplanting methods in large areas. Sediment tubes, approved by the NOAA and Florida Department of Fish and Wildlife Conservation Commission, stabilize trenches to heal and expand habitats. Teaming up with institutions, it is accepting volunteers to assist with shorelines in the Florida Keys' seagrass recovery efforts.

Full story and source: <http://www.treehugger.com/files/2010/01/seagrass-comeback-race-against-time.php>

Dugongs are faring better than feared (Trang, Thailand)

25 January 2010, Bangkok Post

The population of rare dugongs (sea cows) living in Trang waters has slightly dropped by 5-10 sea animals from last year, the latest aerial survey has found. The population of rare dugongs, plural correct known as sea cows, in Trang waters has dropped slightly by between five and 10 from last year, allaying fears of a serious decline, a survey has revealed.

A team of Thai and foreign marine biologists conducted an aerial survey of the animals' population in the Andaman Sea near Libong and Muk islands. About 120 to 130 dugongs have been sighted were spotted during the 10-day survey, said marine biologist Kanchana Adulyanukosol of the Institute for Research and Development of Marine and Coastal Resources in Phuket.

The two islands, rich in seagrass, are major habitats of dugongs. About 11 out of 12 species of seagrass have been found. Ms Kanchana urged local fishermen not to use destructive fishing gear, especially push nets, as they pose a threat to dugongs and other sea creatures. In the past, dugongs and sea turtles have been found trapped in push nets which are used to catch prawns.

On Friday, a four-year-old female dugong, weighing about 120kg, was found dead on a beach in Kantang district, Trang. The dugong, about 1m long, had severe wounds on its body believed to be caused by a push net. It is the first dugong reported to be killed in this way this year.

Full story and source: <http://www.bangkokpost.com/news/local/31683/dugongs-are-faring-better-than-feared>

Dredge help on the horizon (USA)

21 January 2010, Tampa Tribune

BROOKSVILLE - County Administrator David Hamilton said he is considering hiring an engineering services company for the short term to assist newly appointed County Engineer Susan Goebel meet a fast approaching April deadline to finish the Hernando Beach dredge project. Failure to meet that deadline could cost Hernando County about \$7.5 million in matching state funds.

And he scheduled a meeting today with the county's dredge contractor, The Halcrow Group, to find out the extent of the county's contractual obligations with the company and why Mixson was saying Halcrow may need another \$600,000 for seagrass mitigation at the site.

Hamilton also wants to know what, if any, responsibility Halcrow has for the Florida Department of Environmental Protection (FDEP) sending the county two warning letters regarding concerns over the dredging process, including the turbidity, or murkiness of the dredged-up water.

Full story and source: <http://www2.hernandotoday.com/content/2010/jan/21/dredge-help-horizon/>

Related articles: <http://www.tampabay.com/news/localgovernment/new-overseer-wants-hernando-beach-dredging-project-back-on-track/1066952>, <http://www.tampabay.com/news/localgovernment/assistant-county-engineer-resigns-in-hernando/1066491>, <http://www.tampabay.com/news/localgovernment/hernando-commissioners-fault-pay-arrangement-for-dredging-project/1068268>

Coastal areas play a crucial carbon role

19 January 2010, Click Green

Scientists have documented the capacity of coastal habitats to bury and lock away carbon into soils and sediments in a major new report from the International Union for Conservation of Nature(IUCN). The report outlines how seagrass meadows, mangroves and salt marshes have a much greater capacity to trap carbon than land carbon sinks, potentially storing 50 times the amount of carbon that tropical forests do on a per hectare basis. These new revelations have led the IUCN to believe that ocean ecosystems are essential to combating global warming, explains Dr Hilary Kennedy, lead contributor to the chapter on seagrass meadows.

While the role of forests and peatlands in carbon sequestration has been relatively well documented, surprisingly little has been made of the role that coastal habitats play in storing carbon. "Although seagrass meadows cover a relatively small portion of the ocean (approx 1%), they constitute an important carbon sink, responsible for about 15% of the total carbon storage," said Hilary Kennedy from Bangor University's School of Ocean Sciences.

At the recent Copenhagen Climate Change Conference, Carl Gustaf Lundin, head of the IUCN's Global Marine Programme also drew attention to the capacity for coastal environments to lock away carbon for thousands of years. He emphasised the importance of seagrass meadows saying that "seagrass meadows may well be more effective in sequestering carbon than forests," and emphasised that "Investments in protecting coastal ecosystems might be a very cost-effective way to sequester carbon".

Full story and source: <http://www.clickgreen.org.uk/research/trends/121050-coastal-areas-play-a-crucial-carbon-role.html>

SEAGRASS-WATCH magazine Issue 39

The latest issue of Seagrass-Watch news (the official magazine of the global seagrass and assessment program) is now available online at <http://www.seagrasswatch.org/magazine.html>

SEAGRASS-WATCH Workshops 2010

Pacific

Fiji: March 01 -02:(Registration closes 12th February 2010)

For more information: <http://www.seagrasswatch.org/training.html#workshop10>

Australia

Broome, WA, August 13-15

For more information: <http://www.seagrasswatch.org/training.html#workshop10>

CONFERENCES

World Seagrass Conference & ISBW9 (Thailand, November 2010)

A World Seagrass Conference (WSC) and the 9th International Seagrass Biology Workshop (ISBW9) will take place in southern Thailand in November, 2010. The region features fascinating seagrass ecosystems; Phuket is a world-renowned diving area and Trang has Thailand's largest seagrass meadows. Both the WSC and ISBW9 will be hosted by Prince of Songkla University, Southern Thailand.

World Seagrass Conference (WSC) (Phuket, 21–25November, 2010)

Open to all and will include invited plenary lectures and oral and poster presentations. The expected cost for WSC is US\$200 which includes registration, lunches, two dinners and a half-day field trip to the seagrass meadow in Phuket (hotel and travel are separate).

9th International Seagrass Biology Workshop (ISBW9) (Trang, 27–30November, 2010)

ISBW9 will follow the WSC and consist of a smaller group of participants, including both international seagrass experts and regional scientists and practitioners, to address problems of seagrass conservation and restoration, which so far are little known across Southeast Asia and South Asia. The expected cost for the workshop is US\$350, which includes travel to Trang from Phuket, lunches, two dinners and a full day excursion to the nearby seagrass meadow (again, hotel and travel separate).

If you are interested in WSC and/or ISBW9, please respond by filling out the short **Call for Interest** form available from <http://isbw.seagrassonline.org/isbw9/>

Important Dates for the WSC and ISBW9

August 2009	First Announcement, Call for Interest
November 2009	Second Announcement (including themes and a preliminary programme) and Registration Opens
March 2010	Abstract Submission Deadline
June 2010	Notification of Abstract Acceptance for Oral or Poster Presentations, Updated Programme
July 2010	Registration Closes
August 2010	Final Programme Announcement
21–25 November 2010	WSC in Phuket, Southern Thailand
27–30 November 2010	ISBW-9 in Trang, Southern Thailand

GALLERY

Yule Point (Cairns, Qld): 29 January 2010 <http://www.seagrasswatch.org/gallery.html>

Chek Jawa (Singapore): 16 January 2010 <http://www.seagrasswatch.org/gallery.html>

Happy New Year from TeamSeagrass as we start our first monitoring session at Chek Jawa for 2010! It was really nice to see some familiar faces back with us after a long absence. And we also welcomed some new members on the Team! The seagrass meadows of Chek Jawa are doing just fine..

FROM HQ

Frequently Asked Questions <http://www.seagrasswatch.org/faq.html>

Seagrass-Watch News Issue 39 <http://www.seagrasswatch.org/magazine.html>

Seagrass-Watch Shop <http://www.seagrasswatch.org/shop.html>

Virtual Herbarium <http://www.seagrasswatch.org/herbarium.html>

Giveaways <http://www.seagrasswatch.org/shop.html#GIVE1>

Future sampling dates <http://www.seagrasswatch.org/sampling.html>

Handy Seagrass Links <http://www.seagrasswatch.org/links.html>

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Seagrass-Watch E- Bulletin is compiled by Len McKenzie & Rudi Yoshida.